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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,083	05/06/2004	Michael Borella	973.29.01	7848
20306 7590 07/08/2009 MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP 300 S. WACKER DRIVE 32ND FLOOR CHICAGO, IL 60606				
EXAMINER NICKERSON, JEFFREY L.				
ART UNIT		PAPER NUMBER		
2442				
MAIL DATE		DELIVERY MODE		
07/08/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/840,083

**Applicant(s)**

BORELLA ET AL.

**Examiner**

JEFFREY NICKERSON

**Art Unit**

2442

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 and 32-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 and 32-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This communication is in response to Application No. 10/840,083 filed on 06 May 2004. The restriction response presented on 13 March 2009, which elects Group I (claims 1-29, 32-42) and withdraws from consideration claims 43-49, is hereby acknowledged. Claims 1-29 and 32-42 have been examined.

### ***Election/Restrictions***

2. Applicant's election of Group I (claims 1-29 and 32-42) in the reply filed on 13 March 2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Drawings***

3. The amendment presented 12 August 2008 providing change to reference characters in the specification is noted. All outstanding objections to the drawings are hereby withdrawn.

### ***Claim Objections***

4. The amendment presented 12 August 2008 providing change to the claims is noted. All outstanding objections to the claims are hereby withdrawn.

5. Claim 32 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

### ***Response to Arguments***

6. Applicant's arguments, filed 21 August 2008, with respect to the rejection(s) of claim(s) 1-49 under 35 USC 102 and/or 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, new grounds of rejection may appear below.

### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, this claim recites "support of routing as regards communications" in the preamble, which is confusing. For purposes of further examination this phrase will be treated to read as "support of routing of communications". Correction is required.<sup>3</sup>

Regarding claim 15, this claim recites "supports ... communications as between ... clients...", which is slightly confusing and the examiner will treat this phrase as reading "supports ... communications between ... clients ..." for purposes of further examination.

Regarding claim 19, this claim recites "having a plurality of PTT service domains..." but does not clearly distinguish whether a PTT service domain possesses the plurality or whether the PTT service possesses the plurality. Clarification is required.

Regarding claims 2-28, these claims inherit the indefinite features of their parent claim(s).

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 7, 16-17, 24-26, 29, 32, 37-38, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsirtsis et al (US 6,954,442 B2).

Regarding claim 1, Tsirtsis teaches a system to facilitate proxy-based support of routing of communications for a first region and a second region (Tsirtsis: abstract; Figures 3-7), comprising:

- a first proxy (access node), supporting routing of communications for a first plurality of clients in the first region (Tsirtsis: Figure 3, items 300 and 200);

- a second proxy, supporting routing of communications for a second plurality of clients in the second region (Tsirtsis: Figure 3, items 300' and 200'); and

- a third proxy, supporting routing of communications between the first proxy and the second proxy (Tsirtsis: Figure 3, item 334; See also col 6, lines 43-63; col 10, lines 13-40); and

- wherein the proxies are SIP proxies (Tsirtsis: col 9, lines 35-54).

Regarding claim 7, Tsirtsis teaches wherein either the first region, the second region, or both the first region and the second region correspond to a wireless coverage area (Tsirtsis: col 5, lines 21-34).

Regarding claim 16, Tsirtsis teaches wherein the first SIP proxy further supports presence service (Tsirtsis: Figure 3, items 210; col 8, lines 4-13).

Regarding claim 17, Tsirtsis teaches wherein the first SIP proxy further supports presence service for at least some of the first plurality of clients (Tsirtsis: Figure 3, items 210; col 8, lines 4-13).

Regarding claim 24, Tsirtsis teaches wherein the first SIP proxy further comprises routing means for making routing decisions for SIP messages as are provided thereto (Tsirtsis: col 9, lines 35-54).

Regarding claim 25, Tsirtsis teaches wherein the routing means facilitate routing decisions in conjunction with a directory server (Tsirtsis: Figure 8, item 1300; col 16, line 54 – col 17, line 6).

Regarding claim 26, Tsirtsis teaches wherein the routing means make the routing decisions for all SIP messages as are provided thereto (Tsirtsis: col 9, lines 35-54).

Regarding claim 29, this method claim contains limitations corresponding to that of claim 1 and the same rationale of rejection is used, where applicable.

Regarding claim 32, this claim contains limitations found within that of claim 29, and the same rationale of rejection is used, where applicable.

Regarding claim 37, Tsirtsis teaches further comprising upon receiving the SIP message from the first client, automatically authenticating the first client via the at least one SIP proxy (Tsirtsis: Figure 3, items 208; col 9, lines 5-17).

Regarding claim 38, Tsirtsis teaches wherein automatically authenticating the first client comprises using an authentication server (Tsirtsis: Figure 3, items 208; col 9, lines 5-17).

Regarding claim 42, Tsirtsis teaches further comprising upon receiving the SIP message from the first client, automatically publishing presence information about the first client (Tsirtsis: col 8, lines 4-13; col 8, line 46 – col 9, line 4).

11. Claims 3, 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsirtsis et al (US 6,954,442 B2), and in further view of Gallant (US 2002/0165969 A1).

Regarding claim 3, Tsirtsis teaches the use of multiple protocols and varying call session handling (Tsirtsis: col 9, lines 35-54);

Tsirtsis does not teach wherein at least one client in the first plurality of clients is enabled with at least two user identifiers, each user identifier corresponding to a same communication service.

Gallant, in a similar field of endeavor, teaches wherein at least one client in the first plurality of clients is enabled with at least two user identifiers, each user identifier corresponding to a same communication service (Gallant: Figure 3; abstract, [0071]-[0074]; [0052]-[0054]).



It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Gallant for a proxy performing user aliasing. The teachings of Gallant, when implemented in the Tsirtsis system, will allow one of ordinary skill in the art to have each proxy resolve both "to" and "from" user aliasing. One of ordinary skill in the art would be motivated to utilize the teachings of Gallant in the Tsirtsis system in order to reduce user confusion by automating the manipulation of multiple account identifiers and to make AAA more efficient.

Regarding claim 6, this claim comprises limitations found within that of claim 3, and the same rationale of rejection is used, where applicable; and

wherein the same is applied to at least one of the second plurality of clients (Tsirtsis: Figures 3-7).

Regarding claim 10, the Tsirtsis/Gallant system teaches further comprising a fourth SIP proxy dedicated, at least in part, to supporting routing of communications for a third plurality of clients in a third region (Tsirtsis: Figures 3-7);

wherein at least some of the third plurality of clients each have a plurality of differing user identifiers (Gallant: Figure 3, abstract; [0071]-[0075]); and

wherein, for at least one of the third plurality of clients, at least two of the plurality of differing user identifiers each corresponds to a same communication service (Gallant: Figure 3; abstract; [0071]-[0075]; [0052]-[0054]).

12. Claims 2, 5, 8-9, 11-15, 18-22, 27-28, 33-36, and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsirtsis et al (US 6,954,442 B2), and in further view of Official Notice.

Regarding claim 2, Tsirtsis does not teach wherein the first SIP proxy comprises at least two SIP proxies.

An official notice is taken that such use of supporting more than one proxy at a single node as a form of proxy management was well known in the art at the time the invention was made by one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize these known teachings for utilizing multiple proxies at a single node. These known teachings, when implemented in the Tsirtsis system, will allow one of ordinary skill in the art to maintain multiple proxies at one or more access nodes per cell. One of ordinary skill in the art would be motivated to utilize these known teachings in the Tsirtsis system in order to provide load balancing support for the network.

Regarding claims 5, 13-15, 19, 21-22, and 34-36 Tsirtsis teaches:

wherein the first SIP proxy comprises a first hop SIP proxy with respect to a given client in the first plurality of clients (claim 13; Tsirtsis: Figure 3);

wherein the first SIP proxy supports communications for roaming clients in a first region (claim 14; Tsirtsis: Figure 9);

wherein the first SIP proxy supports inter-region communications between clients that are located in different regions (claim 15; Tsirtsis: Figure 6);

wherein the first region comprises a service domain of a service; the service having a plurality of service domains each having a corresponding URI domain name (claim 19; Tsirtsis: col 15, lines 18-53);

wherein the first SIP proxy further comprises authentication and registration means for facilitating authentication of the first plurality of clients (claim 21; Tsirtsis: col 9, lines 5-18; abstract);

wherein the authentication and registration means are further for serving as a registrar for mobile clients (claim 22; Tsirtsis: abstract);

wherein the SIP message from the first client further comprises a SIP message facilitating a communication for the first client (claim 34; Tsirtsis: abstract; col 9, lines 35-54);

wherein the SIP message facilitating a communication for the first client further comprises a SIP message facilitating a wireless communication for the first client (claim 35; Tsirtsis: abstract; col 7, lines 40-57); and

wherein the SIP message facilitating a communication for the first client further comprises a SIP message facilitating a wireline communication for the first client (claim 36; Tsirtsis: abstract; col 7, lines 40-57).

Tsirtsis does not teach further comprising a PTT server;

wherein the PTT server is operably connected to the at least two SIP proxies;

wherein the client is a PTT client; or

wherein a communication service is a PTT communication service.

An official notice is taken that such use of PTT servers being connected to SIP proxies thus providing PTT service to clients as a form of providing a network service was well known in the art at the time the invention was made by one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize these known teachings for utilizing a PTT server connected to the proxies to provide a PTT service. These known teachings, when implemented in the Tsirtsis system, will allow one of ordinary skill in the art to support PTT in a SIP telecomm environment. One of ordinary skill in the art would be motivated to utilize these known teachings in the Tsirtsis system in order provide support for a user-liked service and entice new customers.

Regarding claims 8-9, Tsirtsis teaches wherein the areas are wireless coverage areas (Tsirtsis: Figure 6; col 4, lines 9-26).

Tsirtsis does not teach wherein a coverage area corresponding to the first region at least partially overlaps or does not overlap with a coverage area corresponding to the second region.

An official notice is taken that such use of overlapping and non-overlapping coverage areas as a form of cell construction and management was well known in the art at the time the invention was made by one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize these known teachings for overlapping and non-overlapping coverage areas. These known teachings, when implemented in the Tsirtsis system, will allow one of ordinary skill in the art to handoff callers from one access node to another. One of ordinary skill in the art would be motivated to utilize these known teachings in the Tsirtsis system in order provide prevent calls from being dropped between cells or to maximize coverage area per access node.

Regarding claims 11-12, 27, and 39-41, Tsirtsis does not teach wherein the first SIP proxy supports SIP compression.

An official notice is taken that such use of SIP compression/decompression as a form of SIP proxy processing was well known in the art at the time the invention was made by one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize these known teachings for compressing/decompressing SIP messages at a proxy. These known teachings, when implemented in the Tsirtsis system, will allow one of ordinary skill in the art to compress/decompress SIP messages at the proxies. One of ordinary skill in the art would be motivated to utilize these known teachings in the Tsirtsis system in order reduce bandwidth usage.

Regarding claims 18, 20, and 33, the Tsirtsis/ON system teaches wherein the first region comprises a PTT service domain having a corresponding URI domain name (claim 18; Tsirtsis: col 15, lines 17-53; ON: for PTT);

wherein the first SIP proxy comprises a plurality of SIP proxies (claim 33; ON: proxy consists of multiple proxies); and further comprising:

assigning at least some of the plurality of SIP proxies to different PTT domains in the plurality of PTT domains (claim 33; Tsirtsis: Figures 3-12; col 15, lines 17-53; ON: service being PTT and domains being PTT domains).

Tsirtsis does not teach wherein a region has a plurality of domains; or

wherein the user identifiers for the first plurality of clients have at least one of a domain name and sub-domain name that is distinct from any domain name and sub-domain name, respectively, as is assigned to any network component in the system.

An official notice is taken that such use of splitting domains into sub-domains and uses unique sub-domain/domain combinations was well known in the art at the time the invention was made by one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize these known teachings for domain splitting and subdomain/domain combining. These known teachings, when implemented in the Tsirtsis/ON system, will allow one of ordinary skill in the art to assign proxies to specific sub-domain groupings. One of ordinary skill in the art would be motivated to utilize these known teachings in the Tsirtsis system in order to ease the logical management of a high-number of proxies and domains.

Regarding claim 28, Tsirtsis teaches wherein the first SIP proxy further comprises presence means for supporting presence within the system, at least in part, by supporting SIP (Tsirtsis: abstract; col 8, line 27 – col 9, line 4; col 9, lines 35-54).

Tsirtsis does not teach wherein the support is provided by SIP/SIMPLE.

An official notice is taken that such use of SIP/SIMPLE was well known in the art at the time the invention was made by one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize these known teachings for SIP/SIMPLE. These known teachings, when implemented in the Tsirtsis system, will allow one of ordinary skill in the art to maintain presence by using SIP/SIMPLE. One of ordinary skill in the art would be motivated to utilize these known teachings in the Tsirtsis system in order to enable practicing the invention.

13. Claims 4 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsirtsis et al (US 6,954,442 B2), in view of Gallant (US 2002/0165969 A1), and in further view of Official Notice.

Regarding claims 4 and 23, the Tsirtsis/Gallant system teaches wherein the at least one client in the first plurality of clients is enabled with a first user identifier and a second user identifier (Gallant: Figure 3), wherein the first user identifier is a standard SIP URI (Gallant: Figure 3, JDoe@com.com; Tsirtsis: col 15, lines 17-53) and the second user

identifier is a telecommunications URI (Gallant: [0008]; Figure 3, item 304), and wherein the at least one client is able to use the first user identifier and the second user identifier interchangeably (Gallant: abstract; [0071]-[0076]); and

wherein the authentication and registration means are further accommodating a client that presents either of at least two different available-to-the-client URIs (claim 23; Gallant: abstract; Tsirtsis: abstract).

The Tsirtsis/Gallant system does not teach wherein the communication service is a PTT communication service.

An official notice is taken that such use of PTT services as a form of communication services was well known in the art at the time the invention was made by one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize these known teachings for supporting push-to-talk services. These known teachings, when implemented in the Tsirtsis/Gallant system, will allow one of ordinary skill in the art to support PTT with SIP aliasing via proxies. One of ordinary skill in the art would be motivated to utilize these known teachings in the Tsirtsis/Gallant system in order to provide support for a user-liked service and entice new customers.



***Citation of Pertinent Prior Art***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Buch et al (US 2003/0217165 A1) discloses authentication with SIP proxies.
- b. Chia et al (US 2006/0218302 A1) discloses QoS management with visited/home SIP proxy management.
- c. Crichton et al (US 6,104,716) discloses three-proxy communication setup.
- d. Ejzak (US 6,996,087 B2) discloses iMSC setup using P-CSCF, ie SIP proxy.
- e. Gudjonsson et al (US 6,564,261 B1) discloses generic tiered inter-network proxying for call setup.
- f. Karaul et al (US 2002/0024943 A1) discloses SIP to SS7 mapping using SIP proxies.
- g. Kulkarni et al (US 5,862,481) discloses a SIP internetworking proxy.
- h. Lee (US 2004/0132452 A1) discloses mobile ad hoc network SIP proxying.
- i. O'Neill et al (US 6,988,143 B2) discloses SIP proxy address translating.
- j. Powell et al (US 2002/0073167 A1) discloses tiered proxy management.
- k. Wu et al (US 2005/0238026 A1) discloses SIP proxy internetworking management for telecomm networks.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY NICKERSON whose telephone number is (571)270-3631. The examiner can normally be reached on M-Th, 9:00am - 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. N./  
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